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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,082	09/24/2001	Wei-Sing Chu	2313-113	1159
6449	7590	04/01/2003		EXAMINER
ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005			SPIEGLER, ALEXANDER H	
			ART UNIT	PAPER NUMBER
			1637	

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/869,082	<b>Applicant(s)</b> CHU, WEI-SING
<b>Examiner</b> Alexander H. Spiegler	<b>Art Unit</b> 1656	
<i>-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</i>		
<b>Period for Reply</b>		
<p>A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.</p> <ul style="list-style-type: none"> <li>- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.</li> <li>- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.</li> <li>- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).</li> <li>- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>		
<b>Status</b>		
<p>1)<input checked="" type="checkbox"/> Responsive to communication(s) filed on <u>20 December 2002</u>.</p> <p>2a)<input type="checkbox"/> This action is <b>FINAL</b>.                    2b)<input checked="" type="checkbox"/> This action is non-final.</p> <p>3)<input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213.</p>		
<b>Disposition of Claims</b>		
<p>4)<input checked="" type="checkbox"/> Claim(s) <u>20-36</u> is/are pending in the application.</p> <p>4a) Of the above claim(s) <u>27-36</u> is/are withdrawn from consideration.</p> <p>5)<input type="checkbox"/> Claim(s) _____ is/are allowed.</p> <p>6)<input checked="" type="checkbox"/> Claim(s) <u>20-26</u> is/are rejected.</p> <p>7)<input type="checkbox"/> Claim(s) _____ is/are objected to.</p> <p>8)<input type="checkbox"/> Claim(s) _____ are subject to restriction and/or election requirement.</p>		
<b>Application Papers</b>		
<p>9)<input type="checkbox"/> The specification is objected to by the Examiner.</p> <p>10)<input type="checkbox"/> The drawing(s) filed on _____ is/are: a)<input type="checkbox"/> accepted or b)<input type="checkbox"/> objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).</p> <p>11)<input type="checkbox"/> The proposed drawing correction filed on _____ is: a)<input type="checkbox"/> approved b)<input type="checkbox"/> disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action.</p> <p>12)<input type="checkbox"/> The oath or declaration is objected to by the Examiner.</p>		
<b>Priority under 35 U.S.C. §§ 119 and 120</b>		
<p>13)<input checked="" type="checkbox"/> Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)<input type="checkbox"/> All    b)<input type="checkbox"/> Some * c)<input checked="" type="checkbox"/> None of:            1.<input checked="" type="checkbox"/> Certified copies of the priority documents have been received.            2.<input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____.            3.<input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</p> <p>* See the attached detailed Office action for a list of the certified copies not received.</p>		
<p>14)<input type="checkbox"/> Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a)<input type="checkbox"/> The translation of the foreign language provisional application has been received.</p>		
<p>15)<input type="checkbox"/> Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.</p>		
<b>Attachment(s)</b>		
<p>1)<input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2)<input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3)<input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u>.</p> <p>4)<input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____</p> <p>5)<input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6)<input type="checkbox"/> Other: _____</p>		

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 20-26, drawn to a concave coverslip and a method of performing an assay on a biological sample on a microscope slide using said coverslip.

Group II, claim(s) 27-30, drawn to a method of performing an assay on a biological sample using a reaction chamber for processing.

Group III, claim(s) 31-36, drawn to a multireaction chamber machine comprising one or more inlets and one or more outlets.

2. The inventions listed as Groups I-III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The special technical feature of Group I is a concave coverslip and a method of using said coverslip, whereas the special technical feature of Group II is a method of performing an assay on a microscope slide, wherein said microscope slide is placed into a reaction chamber. The special technical feature of Group III is a multireaction chamber machine comprising one or more inlets and one or more outlets. Therefore, these groups do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features.

3. During a telephone conversation with Jeff Ihnen on March 12, 2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 20-26. Affirmation of this election must be made by applicant in responding to this Office action.

Claims 27-36 are withdrawn from further consideration by the Examiner, 37 C.F.R. § 1.142(b), as being drawn to a non-elected invention.

4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

***Information Disclosure Statement***

6. The information disclosure statement of Paper No. 4 complies with CFR 1.97, 1.98, and M.P.E.P. 609, and has been considered.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 20, 22-23, 25 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Atwood et al. (USPN 5,364,790).

Atwood teaches a coverslip for a microscope slide where a portion of the coverslip is concave. (see Figs. 1, 2 and 4 and cols. 7-8) Atwood also teaches the combination of a concave coverslip, a microscope slide and an insert of a control sample sandwiched between a portion of said coverslip and said microscope slide. (see Figs. 1, 2 and 4 and cols. 7-8, 16-17). Atwood teaches that the component system comprising the coverslip, microscope slide and reagents (taught above), can be used in performing a PCR reaction. (see columns 5-6 and 10-19).

*Claim Rejections - 35 USC § 103*

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 21 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atwood et al. (USPN 5,364,790) as applied to claims 20, 22-23, 25 and 27 above, and further in view of Pan et al. (WO 97/07241).

The teachings of Atwood are presented above. Specifically, Atwood teaches a concave cover slip, which can be used in a PCR reaction. Atwood does not teach a coverslip comprising reagents dried thereon.

However, drying reagents onto coverslips is well known in the art. For example, Pan teaches a PCR reaction comprising attaching a tissue section onto a coverslip, drying the tissue, and then adding reagents to carry out the PCR reaction (pg. 3-10 and example 4). Pan teaches that the tissue can be attached to the coverslip, rinsed in alcohol and allowed to dry prior to PCR

(pg. 5). Pan also teaches that prior to the attachment of the tissue, the coverslip can have a pre-dried adhesive on the surface of the coverslip (pg 9), or can simply be dried over night (pg. 18). Pan teaches the above methods provided a simplified method that is faster, more accurate and less expensive than previous methods of carrying out PCR (see pages 1-3).

Therefore, in view of the teachings of Pan, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Atwood so as to have dried reagents on a coverslip, in order to have achieved the benefit of providing a more efficient, accurate and less expensive method of carrying out PCR.

11. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Atwood et al. (USPN 5,364,790) as applied to claims 20, 22-23, 25 and 27 above, and further in view of Kuan et al. (USPN 6,181,811).

The teachings of Atwood are presented above. Specifically, Atwood teaches a concave cover slip. Atwood does not teach a coverslip comprising a barcode or text.

However, the use of barcodes or text is a well-known tool for identifying slides or coverslips of interest. For example, Kuan teaches that barcodes can be used for identification purposes in automated systems (See Figs. 8a and b and cols. 14-15).

Therefore, in view of the teachings of Kuan, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the coverslip of Atwood so as to have labeled the coverslip with a barcode or text, in order to have achieved the benefit of providing an effective means for identifying a sample in an automated system.

### *Conclusion*

12. No claims are allowable.

*Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander H. Spiegler whose telephone number is (703) 305-0806. The examiner can normally be reached on Monday through Friday, 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on (703) 308-1119. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4242 and (703) 305-3014. Applicant is also invited to contact the TC 1600 Customer Service Hotline at (703) 308-0198.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Alexander H. Spiegler  
March 31, 2003

KENNETH R. HORLICK  
KENNETH R. HORLICK, PH.D  
PRIMARY EXAMINER

3/31/03